Appendix A

Soil Pile Removal – Proposed Air Monitoring Effort

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SOIL PILE REMOVAL – PROPOSED AIR MONITORING EFFORT

1. Environmental Monitoring

The following monitoring is proposed as a supplement to the Community Air Monitoring Plan (CAMP) currently being implemented and associated with the site demolition project. These fixed stations are being added to the site monitoring effort to monitor the work associated with the management of materials staged in the onsite containment cells. Parameters monitored at these 3 fixed locations (see figure 1) will include dust and PCB's.

The following describes the methods and standard operating procedures which will be followed for implementing this additional monitoring.

1.1 Particulate Dust Air Monitoring

Consistent with the current CAMP, air monitoring for particulate dust will be conducted during all intrusive phases of the soil pile removal work. Particulate dust monitoring will utilize real-time dust particulate meters (Dust Trac 8530 or equivalent) at AIR-1, AIR-2, and AIR-3 during construction work hours each day. The time weighted average (TWA) will be recorded in the instrument's memory and each instrument is equipped with modems to transmit data to the Pro RAE Remote Computer Console for real-time monitoring.

The locations of the monitoring stations are shown on Figure 1. The dust monitoring will begin during the initial uncovering of the liners from the soil piles, continue through soil pile removal activities, and end when the soil pile removal task is complete.

The action level for particulate dust will be sustained readings (15 minutes) of 150 micrograms per cubic meter (ug/m^3) above background levels in conformance with current on site CAMP. If the action level is met or exceeded at any monitoring station, then those activities contributing to the level will be suspended. The problem shall be rectified through the use of dust suppressant such as a fine water spray. Construction will be allowed to resume once particulate dust levels have dropped below the action level.

1.2 PCB Air Monitoring

High Volume air sampling for PCBs will be conducted during site remedial activities utilizing the equipment and procedures described in USEPA Method TO-4. Sampling will be conducted at AIR-1, AIR-2, and AIR-3 during the uncovering and soil pile

removal phase of the work activities. The high volume air samples will be collected from the three locations over a 24-hour period (+/-), at which time the sample pre-filter and PUF cartridge will be sent offsite for PCB analysis. The laboratory will be required to report the PCB results within 48 hours of sample receipt. Prior to air sampling, the equipment will be calibrated according to manufacturers' specifications to determine air sampling flow rates. High volume air sampling may be temporarily suspended with USEPA concurrence during periods of work suspension or inactivity.

PCB actions levels from similar remedial projects (Reynolds Metals, New Bedford Harbor, GM Massena, and Hudson River) were reviewed and evaluated for the Soil Pile Removal project. The two PCB action levels proposed to protect public health at monitoring stations AIR-1, AIR-2, and AIR-3 during the project are as follows:

- 0.07 ug/m^3 – Evaluation Level.
- 0.11 ug/m^3 – Contingency Level.

Upon receipt of sample analytical results, ARCADIS will notify the USEPA onsite representative and construction contractor supervisor. If the PCB Evaluation Level is exceeded (0.07 ug/m^3), ARCADIS and USEPA will determine if any contingency action is necessary. If the PCB Contingency Level is exceeded (0.11 ug/m^3) ARCADIS will notify the contractor and institute contingencies immediately.

Contingencies plans for exceedances will include one or more of the following:

- Covering PCB-containing stockpile(s) with polyethylene sheeting;
- Watering down and/or wetting specific areas or roads with a fine water mist or spray;
- Limiting and/or reducing the open loading/excavation area(s); and
- Limiting, reducing, and/or slowing down the construction work period during the day.

1.3 Volatile Organic Compound Air Monitoring

Real-time air monitoring for total VOCs will be conducted directly adjacent to the soil piles during removal of PCB-containing material. The real-time monitoring will be

conducted utilizing a photo ionization detector (PID). During removal activities, PID readings will be collected at a minimum frequency of once every four hours at the source of the soil pile removal and at each monitoring station until the work has been completed for the day. All data will be recorded into a field logbook. The PID will be calibrated according to manufacturer's instructions on a daily basis and periodically checked to insure proper working condition.

The proposed real time action level for total VOCs is 5 ppm. If 5 ppm totals VOCs are sustained for 10 minutes, compound specific monitoring may be necessary to determine the contaminant of concern. Other contingency actions such as those proposed in Section 3.2 for exceedances of high PCB levels in the air may be necessary.

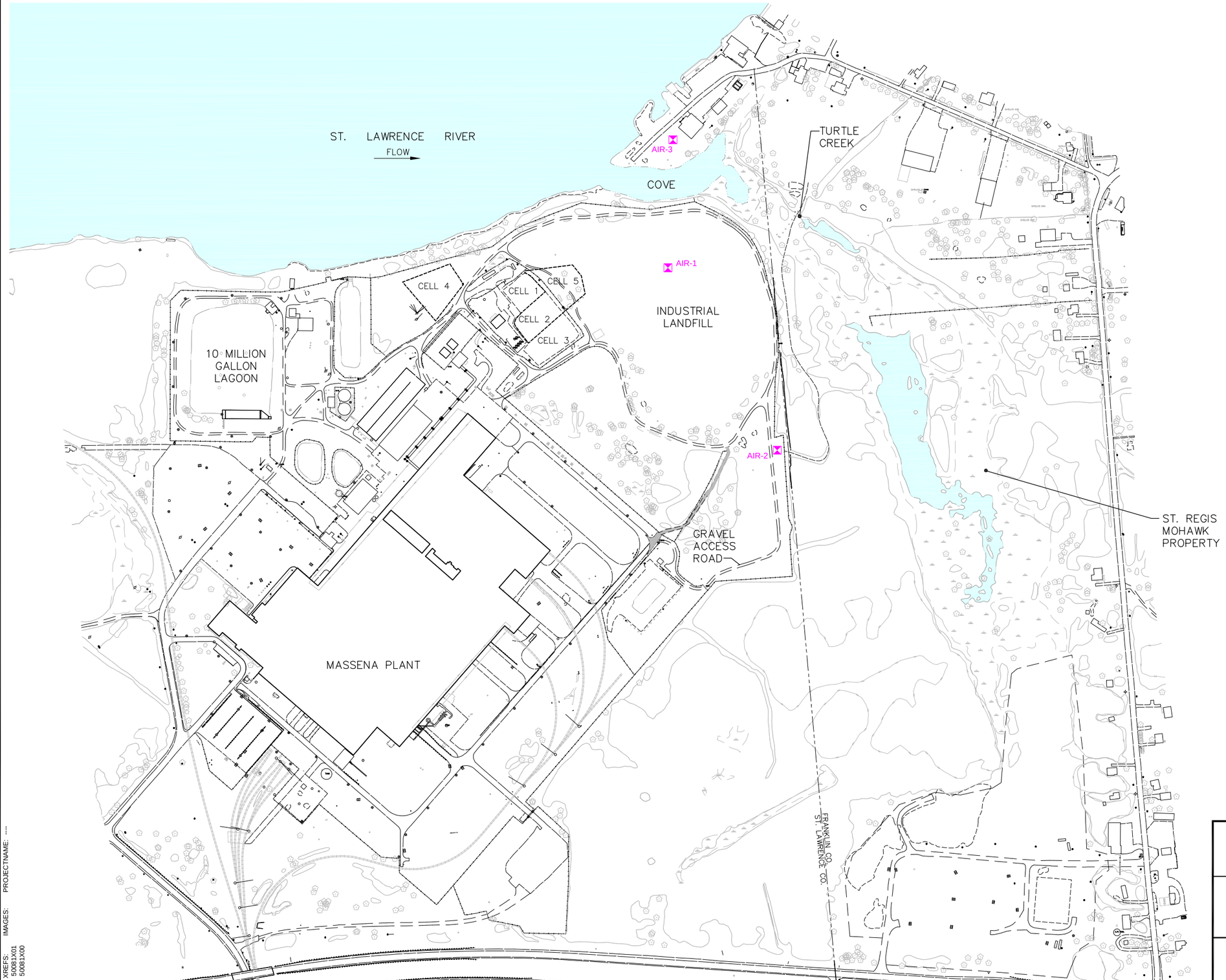
2. Quality Assurance Quality Control

Quality assurance/quality control (QA/QC) will generally follow the Quality Assurance Project Plan (QAPP) (ARCADIS, 2010), submitted to USEPA in December, 2010.

Samples will be logged into a field notebook, noting date and sampling time interval(s). Collected samples will be sent to the laboratory using standard chain of custody procedures. The chain of custody will stipulate the samples to initially analyze with appropriate laboratory method. ARCADIS will employ a New York State Department of Health/Environmental Laboratory Accreditation Program (NYS DOH/ELAP) certified laboratory for the analysis of all samples.

The samples will be analyzed for PCB Aroclors using USEPA SW-846 Method TO-4. Laboratory detection limits will be specified to be at or below 0.1 ug/m^3 for total PCBs and 0.05 ug/m^3 for individual PCB Aroclors. The laboratory TAT for PCB analyses will be 48 hours from laboratory sample receipt.

Personnel protective equipment to be used during PCB air sampling shall be Level D protection. Standard Level D protection consists of protective gloves, steel-toe boots, and hard hats.



LEGEND:

AIR MONITORING LOCATION

NOTE:

1. BASE MAPPING BASED ON PHOTOGRAMMETRY BY CAMP, DRESSER & McKEE DERIVED FROM 1997 AERIAL PHOTOGRAPHY.

0 200' 400'
GRAPHIC SCALE

RACER TRUST FACILITY
MASSENA, NEW YORK
SOIL PILE REMOVAL
ENVIRONMENTAL MONITORING PLAN

AIR MONITORING LOCATIONS

ARCADIS

FIGURE
1

CITY:SYRACUSE, NY DIV/GROUP:ENVCAD DB:R PETRIE LD: PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIVE\50050081\2011\00203\DWG\50081B01.DWG LAYOUT: 1 SAVED: 6/22/2011 3:03 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/22/2011 3:08 PM BY: PETRIE, RICH
XREFS: IMAGES: PROJECTNAME: ---
50081X01
50081X00

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TSCA Demolition Debris & Cell 3 Impacted Soils Load Out & Traffic Route

The purpose of this work plan is to convey the precautions to be implemented and procedures to be followed in order to utilize up to 6,000 tons of TSCA contaminated soil from on site containment pile Cell 3 (Location identified on Attached Figure 1). Brandenburg has contracted with Heritage Transport, LLC to provide onsite support loading intermodal boxes, and ultimate disposal of TSCA regulated PCB waste metal and soil from the Massena project site.

Objective

The objective of this task is to maximize the weight of waste per rail car that is being shipped to Heritage's waste disposal facility in Indiana. The goal is to ship on average 15 tons of waste per box, on a per rail car basis, while each rail car can carry 6-8 intermodal boxes.

Approach

Brandenburg proposes the following steps in performing the work;

1) Unload and stage boxes adjacent to track 7.
2) Get a weight of one empty intermodal as representative of all empty intermodal boxes.
3) Load a number of boxes with TSCA building material to get a sense of the weight of TSCA building material that can be put in the boxes.
4) Load Soil at Cell 3.
    a) Utilize a designated 35 cubic yard Brandenburg Roll-off and get a weight of soil material in the box.
        i) Stage the soil box in the TSCA load out area to be used to "top off" steel waste boxes as they are being loaded (based on previous loading work).
    b) Utilize an empty, lined intermodal box and live load full boxes of soil
    c) Stage several lined intermodal boxes for subsequent loading
5) Move loaded box to scale for final weight and verification of meeting minimum requirements.
6) With final weight complete Heritage will complete Hazardous waste manifest paperwork, ARCADIS will review and sign for RACER, to release the box from the site.
7) Car pulled from site by CSX

In the event the box does not meet the goal of a minimum weight of 15 tons Brandenburg will assess the weights of other boxes being placed on the same car and will determine the most effective approach to rectify the weight by either adding soil to already loaded boxes or simply providing soil only boxes (which can max out the box carrying capacity of 25 Tons) to be loaded on to the car with the lighter boxes thereby raising the per box average.

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Brandenburg will coordinate site activities and box movements around the site using Brandenburg forces and Heritage personnel and equipment.

Material Loading at Cell 3

The following procedures will be utilized during the excavation and transfer of materials from Cell 3 to the transport truck.

1. Excavation and loading of soils from cell 3 will not take place when weather conditions (rain) cause soil material to be too wet to transport.
2. Loading will take place from the south side of the pile adjacent to the access road.
3. The orange construction fence will be temporary removed in the location of the loading operation to be able to access the pile.
4. Laborers will pull back the green cover and black cover if applicable only exposing enough of the area to be loaded into the box.
5. During loading, barrier tape will be placed at the two entrance locations of the access road.
6. An excavator fitted with a digging bucket will be placed adjacent to the pile. Once the pile is excavated to a point where the excavator will need to encroach within the orange fence area, wood matting will be placed under the excavator as a temporary work platform. Upon completion of the project, the wood matting will either be disposed as a TSCA material or will be left for future site usage.
7. A clean polyethylene liner will be placed in the location that the trucks will be loaded so the truck tires will remain on a clean surface. Any soil spilled on the polyethylene during loading will be cleaned up prior to the truck driving of the lining.
8. A splash shield will be utilized to keep the side of the truck clean during loading operations.
9. The green and black lining over Cell 3 will be re-applied upon completion of loading for each day.

On-Site Transportation

On-site transportation of impacted soils will be performed either in a designated 35 cubic yard Brandenburg roll-off box or via Heritage's on-site transfer truck in an intermodal container designated for direct shipment. All boxes will be directed to the on-site truck scale prior to loading for the tare weight and post loading for the gross weight. The transportation route will be dependent upon daily site coordination and applicable structural building demolition activities. Transportation of loads to the scale house is represented in Figure 1 and Figure 2.

Figure 3 represents the traffic route for intermodal boxes prepared to be placed on the rail car for shipment.

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Figure 4 represents the traffic route for the Brandenburg roll-off box into the TSCA Exclusion zone. If the roll-off box is used to convey the soil, the roll-off container will be off-loaded from the back of the truck and set on polyethylene sheeting placed within the TSCA concrete limits. Soils will be excavated from the box during the loading of the intermodal boxes, comingling the building material and soil.

Equipment Decontamination

Brandenburg's intent is to only have the bucket of the excavator come in contact with the impacted soil. At the end of the load out operation, the bucket and if necessary, the excavator will be transported to the existing decontamination location as identified in the approved SOP and to be decontaminated and verified clean.

Figure 1 - South Transportation Route to Scale

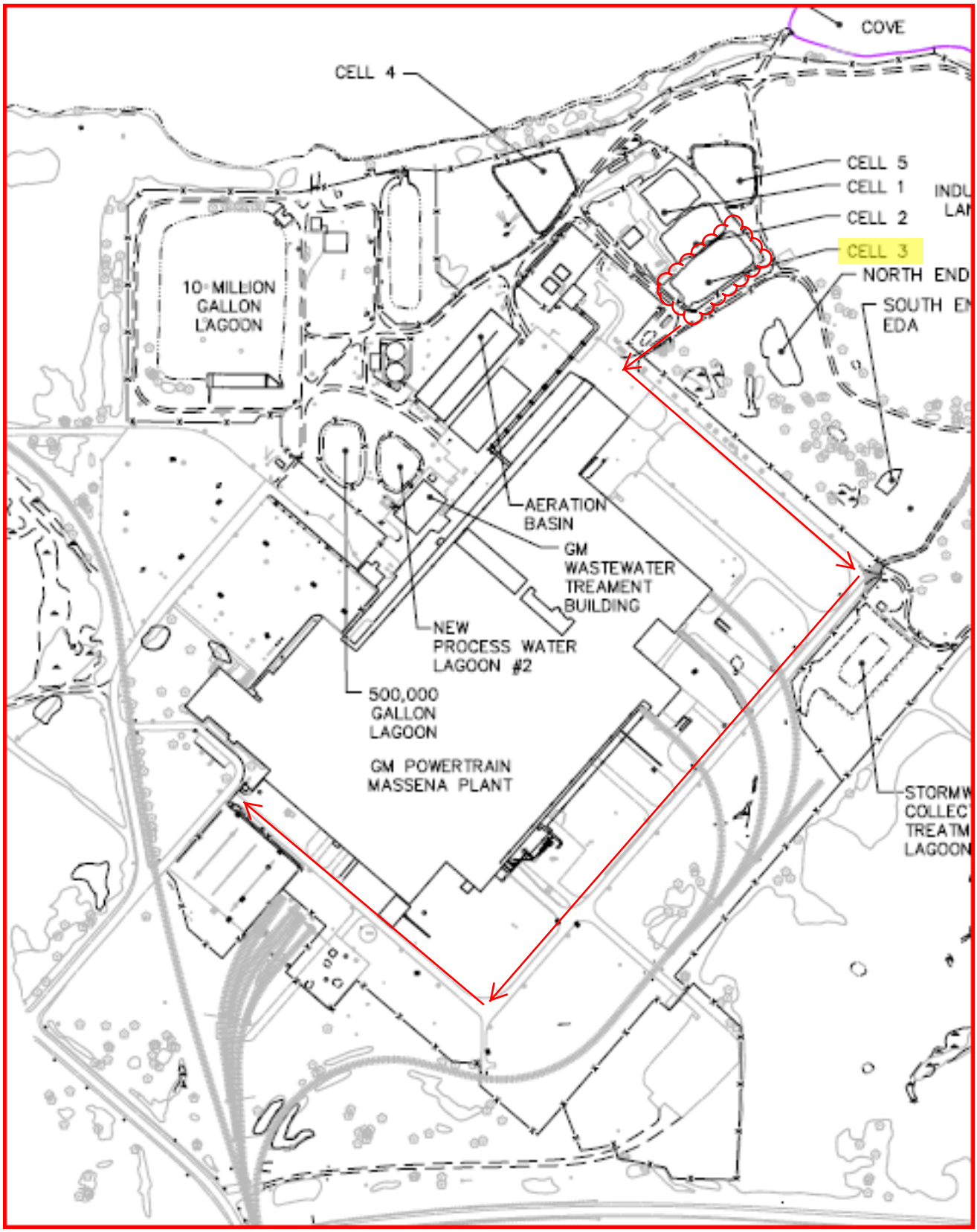

Figure 2 - North Transportation Route to Scale

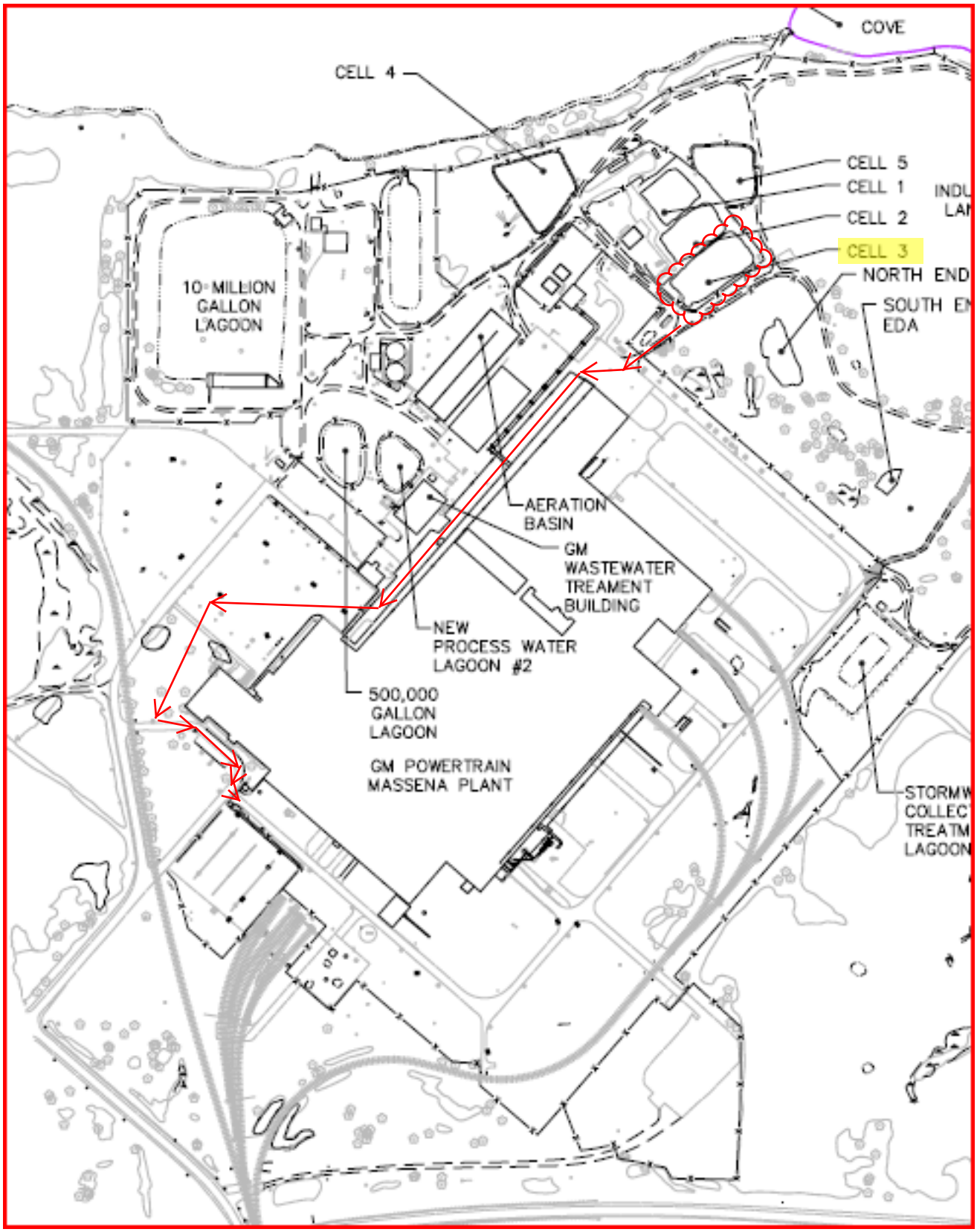

Figure 3 - Intermodal Box Transportation Route

Scale to Intermodal Loading Area

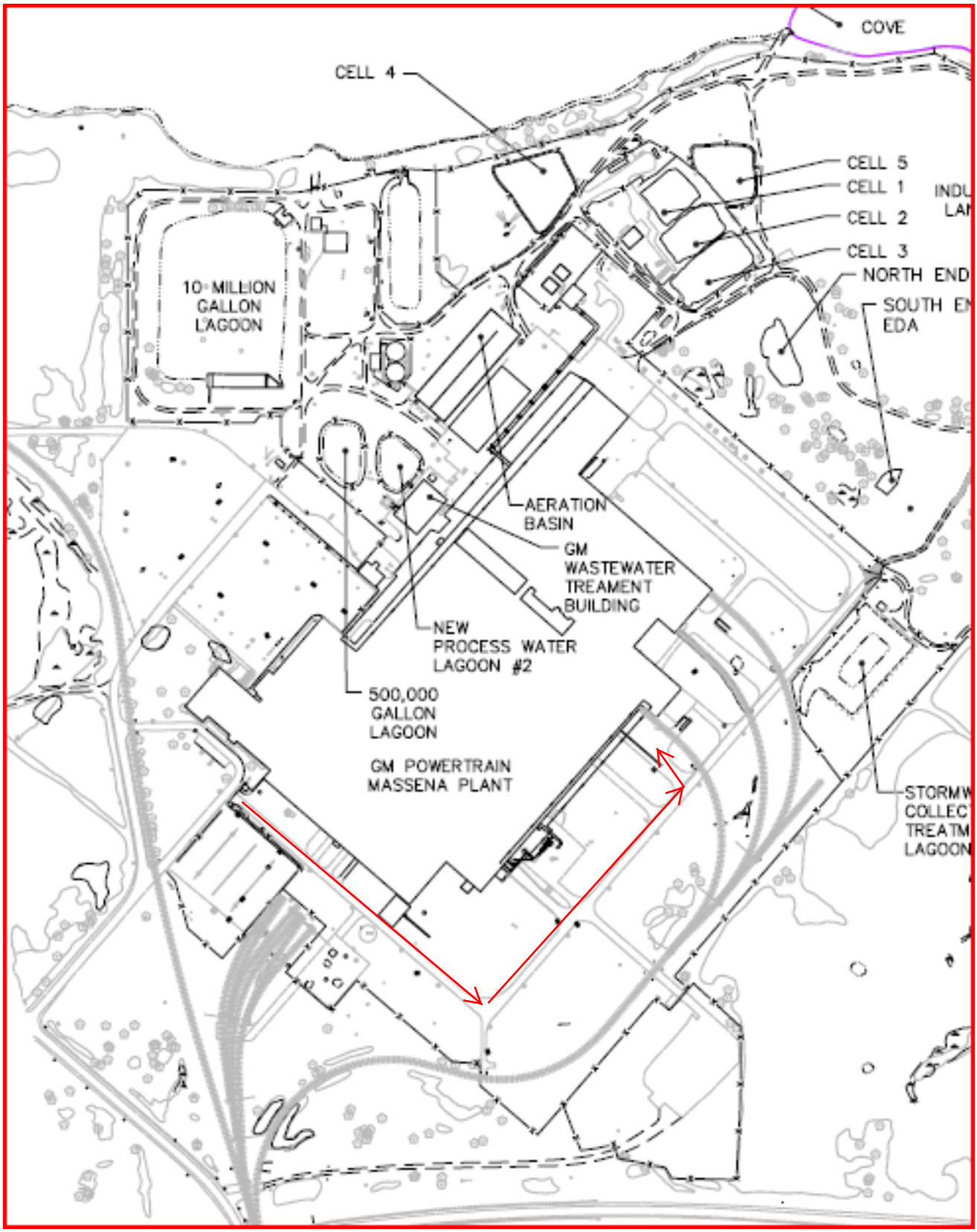

Figure 4 - Brandenburg Box Transportation Route

Scale to TSCA Loading Area